A4-05 Surgery, Mon, 13:45 - 15:30

Preparation for a new TNM stage: The prognostic significance of multiple station N2 in stage IIIA non small cell lung cancer

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Background: Stage IIIA non small cell lung cancer(NSCLC) is heterogenous diseases in one category. This study was conducted to determine the prognostic implication of the multiple station N2 lymph node metastasis in pathologic stage IIIA N2 NSCLC and to propose a new nodal stage in a new TNM stage.

Method: Three hundred and fifty-eight patients with resected NSCLC who eventually proved to have pathologic stage IIIA N2 and stage IIIB disease were reviewed. The patients were divided into three groups: Single IIIA group are those who have single station N2 disease in stage IIIA NSCLC; Multiple IIIA group are those who have multiple station N2 disease in stage IIIA NSCLC; IIIB group are those who have stage IIIB NSCLC. Patients who received preoperative induction therapy were excluded from this study.

Result: Number of the patients in Single IIIA group was 175, in Multiple IIIA group 87, and in IIIB group 96. Between the three groups, there were no differences in sex, histopathology, tumor size, primary site, number of lymph nodes dissected and performed procedures (except 17 open and closure cases in IIIB group). In stage IIIA N2 NSCLC(Single IIIA group and Multiple IIIA group), a log-rank test revealed that factors such as age>60, male, T stage, pneumonectomy, multiple station N2 were associated with poor survival rate. In multivariate analysis, age>60 (risk ratio=2.452, p=0.000), pneumonectomy (risk ratio=1.478, p=0.007), and multiple station N2 (risk ratio=2.089, p=0.004) were independent prognostic factors for poor survival rate. Multiple IIIA group (20.4%) had lower 5-year survival rate than Single IIIA group (33.8%) (p=0.016), but had no difference with IIIB group(15.5%) (p=0.577).

Conclusion: Multiple station N2 disease was important prognostic factor for poor survival rate in pathologic stage IIIA N2 non-small cell lung cancer. There was no difference in survival between multiple station N2 stage IIIA and stage IIIB.

We suggest that N2 lymph node should be divided into two categories: N2a and N2b; the former be defined in a single station N2; the latter in multiple station N2, and that N2b be considered as N3 lymph node in a new TNM stage.

A4-06 Surgery, Mon, 13:45 - 15:30

Patients-oriented prospective study in comparison between two types of VATS lobectomy for clinical T1N0 lung cancer

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Background: Video assisted thoracic surgery (VATS) is not currently a standard operative procedure for lung cancer because of a few prospective comparison study. Moreover, it is still unresolved issue whether the degree of chest wall destruction by various VATS thoracotomy affects clinical outcomes. The variety of its technical approaches of video-assisted thoracic surgery (VATS) lobectomy is also indicated depending on the facilities. Therefore, the clinical outcomes of VATS lobectomy were compared between two different methods of VATS lobectomy, which was determined by informed consent before the surgery.

Methods: We experienced reviewed 74 consecutive patients with clinical T1N0M0 non-small cell lung cancer (NSCLC) that underwent either two levels of VATS lobectomy with mediastinal lymph adenectomy. By showing the patients an easy schema which says characteristics of each procedure to help their understanding, the selection was completely based on their decision before the surgery. Eighteen cases (ASSIST group) underwent lobectomy performed mainly using the light guide of thoracoscope in an anterolateral small thoracotomy (around 10cm) with the use of a rib spreader. In 56 cases (PURE group), only a monitor was used during minithoracotomy (3-4cm), which is minimum access to extract specimen, without the use of a rib spreader. In PURE, minimum access window enables an operator to use scissors just like the open thoracotomy. Technique in both groups was in the same manner. Short-time clinical outcomes and long-term prognosis was compared prospectively.

Results: Women tended to prefer PURE to ASSIST (20/36 vs. 13/5, p<0.05). Operation time in PURE was significantly longer those in ASSIST (226 vs. 172 min., p<0.0001). Total discharge from the chest drainage tube was significantly less in PURE than in ASSIST (696 vs. 1066 ml, p<0.05) Mean length of hospital stay was significantly shortened in PURE in comparison with those in ASSIST (7.8 vs.13.2 days, p<0.0001). Dose of suppository painkiller (declofenac sodium) was less in PURE within one week after the surgery (12.5 vs. 65.6 mg, p<0.001). More cases in ASSIST also received intramuscular painkiller injection (pentazocine). Postoperative morbidity was significantly reduced in PURE (7/56 vs. 7/18, p<0.05). Numbers dissected mediastinal lymph nodes were equivalent between the two groups. The 3-year disease-free and overall survival rates were also very close among the two groups.

Conclusions: Minimally invasive VATS lobectomy under a pure thoracoscope-view gave patients early recovery from surgery in association with the chest wall destruction, especially regarding the reduction of postthoracotomy pain in patients-oriented prospective study. It also achieved quality of mediastinal lymph node dissection and good prognosis as an acceptable cancer operation for peripheral T1N0 NSCLC.

A4-07 Surgery, Mon, 13:45 - 15:30

Prognostic factors for survival of stage I non-small cell lung cancer (NSCLC) patients: a population-based analysis of 19,702 stage I patients in the California Cancer Registry (CCR) from 1989 to 2003

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Purpose: Platinum-based adjuvant chemotherapy in randomized trials has failed to provide a survival benefit in resected stage I non-small-cell lung cancer (NSCLC). Using data from California Cancer Registry (CCR), we explored factors that have detrimental effects on survival in stage I NSCLC to identify a subset of patients at high risk for relapse and subsequent mortality.

Methods: 19,702 incident cases of stage I NSCLC in the CCR between 1989 and 2003 were identified and subgrouped into stage IA and IB